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HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
3404 E. Harmony Road  
Mail Stop 35  
FORT COLLINS, CO 80528

EXAMINER
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SIM, YONG H

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* RICHARD E. AUFRANC, JR., DAVID C. COLLINS,  
and P. GUY HOWARD

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Appeal 2009-009926  
Application 10/693,287  
Technology Center 2600

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Before, ROBERT E. NAPPI, MARC S. HOFF, and CARLA M. KRIVAK,  
*Administrative Patent Judges.*

NAPPI, *Administrative Patent Judge.*

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) of the rejection of claims 1 through 50.

We reverse.

## INVENTION

The invention is directed to a video display where image sub-frames of an interlaced video content are displayed in spatially different positions. See paragraphs 33 and 34 of Appellants' Specification. Claim 1 is representative of the invention and is reproduced below:

1. A display system for displaying an interlaced image frame, said interlaced image frame comprising a top field and a bottom field, said top and bottom fields each having lines of pixels, said system comprising:
  - an image processing unit configured to process a stream of pixel data elements sequentially corresponding to said pixels in said top and bottom fields and generate a number of image sub-frames;
  - a modulator configured to generate a light beam bearing said number of image sub- frames; and
  - a wobbling device configured to displace said light beam such that each of said image sub-frames is spatially displayed offset from a previous image sub-frame by an offset distance less than a pixel width;wherein at least one of said image sub-frames is generated using only said pixel data elements in said top field and at least one of said image sub-frames is generated using only said pixel data elements in said bottom field.

## REFERENCES

Ran	US 5,581,302	Dec. 3, 1996
Endo	US 6,407,726 B1	Jun. 18, 2002
Katoh	US 2003/0090597 A1	May 15, 2003
Monti	US 6,680,748 B1	Jan. 20, 2004

## REJECTIONS AT ISSUE

The Examiner has rejected claims 1 through 4, 10 through 12, 17 through 22, 28 through 30, 35 through 38, and 44 through 46 under 35 U.S.C. § 103(a) as being unpatentable over Katoh in view of Endo. The Examiner's rejection is on pages 4 through 12 of the Answer.<sup>1</sup>

The Examiner has rejected claims 5, 23, and 39 under 35 U.S.C. § 103(a) as being unpatentable over Katoh in view of Endo and Monti. The Examiner's rejection is on pages 12 through 13 of the Answer.

The Examiner has rejected claims 6 through 9, 13 through 16, 24 through 27, 31 through 34, 40 through 43, and 47 through 50 under 35 U.S.C. § 103(a) as being unpatentable over Katoh in view of Endo and Ran. The Examiner's rejection is on pages 14 through 17 of the Answer.

## ISSUE

Appellants argue on pages 13 through 14 of the Brief, and pages 10 through 11 of the Reply Brief,<sup>2</sup> that the Examiner's rejection of claim 1 under 35 U.S.C. § 103(a) is in error. Appellants' arguments present us with the issue: did the Examiner err in finding that Katoh teaches forming one sub-image using only data from the one field of the interlaced video, i.e. top

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<sup>1</sup> Throughout this decision we refer to the Examiner's Answer dated November 26, 2008.

<sup>2</sup> Throughout this decision we refer to the Brief dated August 29, 2008, Reply Brief January 26, 2009.

field and forming another sub-image using only data from the other as recited in claim 1?<sup>3</sup>

Appellants' arguments directed to independent claims 18 and 36 present us with a similar issue.

## ANALYSIS

### *Independent claim 1*

Appellants' arguments have persuaded us of error in the Examiner's rejection. Independent claim 1 recites "wherein at least one of said image sub-frames is generated using only said pixel data elements in said top field and at least one of said image sub-frames is generated using only said pixel data elements in said bottom field." On pages 22 and 23 of the Answer, the Examiner cites to several passages in Katoh that discuss interlaced scanning techniques that teach separate fields of video to process an image frame. While we concur with the Examiner that Katoh discusses displaying interlaced video, we disagree with the Examiner's finding that the sub-frames relate to the interlaced image frames as claimed. Claim 1 refers to the wobbling device being used to displace the light beam to display pixels in the image sub-frames. The Examiner's rejection relies upon Katoh's image sub-frames depicted in Figure 5 to meet the claimed sub-frames displayed by wobbling. Answer 19-20. However, as is clear from Figures 4-7, these sub-frames relate to the color to be displayed and not the top or bottom field of an interlaced signal. Accordingly, the Examiner has not demonstrated that all of the features of independent claim 1 are taught by the

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<sup>3</sup> While Appellants' arguments present additional issues, we do not reach these additional issues as this issue is dispositive of the rejections on appeal.

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references and we will not sustain the Examiner's rejection of Independent claim 1 or dependent claims 2 through 4, 10 through 12, and 17 similarly rejected. The Examiner has not shown that the additional teachings of Monti and Ran include such a feature, thus we similarly will not sustain the rejections of claims 5 through 9 and 13 through 16.

*Independent claims 18 and 36*

Independent claims 18 and 36 are of different scope from claim 1 but similarly recite that top and bottom image frames from an interlaced image are displayed by wobulation. The Examiner's findings directed to this claim rely upon the same rationale discussed above with respect to claim 1. As discussed above, we disagree with this rationale. Accordingly, we will not sustain the Examiner's rejections of claims 18 through 50.

CONCLUSION

Appellants have not persuaded us of error in the Examiner's decision to reject claims 1 through 50.

ORDER

The decision of the Examiner to reject claims 1 through 50 is reversed.

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REVERSED

ELD